



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/507,032	10/13/2004	Eisaku Suda	04703-0201831-US0	8788		
7278	7590 02/02/2006	EXAMINER				
DARBY & DARBY P.C.			GROUP, KARL E			
P. O. BOX 5: NEW YORK	257 NY 10150-5257		ART UNIT	PAPER NUMBER		
	,		1755			
			DATE MAILED: 02/02/2006	DATE MAILED: 02/02/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applica	tion No.	Applicant(s)				
Office Action Summary		10/507	,032	SUDA ET AL.	SUDA ET AL.			
		Examin	ier	Art Unit				
		Karl E.	Group	1755				
The MAIL Period for Reply	ING DATE of this communica	tion appears on t	he cover sheet	with the correspondence a	address			
A SHORTENED WHICHEVER IS - Extensions of time m after SIX (6) MONTH - If NO period for reply - Failure to reply within Any reply received by	STATUTORY PERIOD FOR LONGER, FROM THE MAIL ay be available under the provisions of 3 S from the mailing date of this communic is specified above, the maximum statutor the set or extended period for reply will, the Office later than three months after djustment. See 37 CFR 1.704(b).	LING DATE OF of CFR 1.136(a). In no cation. bry period will apply and, by statute, cause the a	THIS COMMUN event, however, may will expire SIX (6) Mapplication to become	NICATION. a reply be timely filed ONTHS from the mailing date of this ABANDONED (35 U.S.C. § 133).				
Status								
1) Responsiv	e to communication(s) filed o	on .						
2a)☐ This action	` '	 ⊠ This action is	non-final.					
3) Since this								
closed in a	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Clair	ns							
4)⊠ Claim(s) <u>1</u> -	☑ Claim(s) <u>1-9</u> is/are pending in the application.							
4a) Of the a	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)⊠ Claim(s) <u>1</u> -	Claim(s) <u>1-7</u> is/are allowed.							
6)⊠ Claim(s) <u>8</u>	Claim(s) <u>8 and 9</u> is/are rejected.							
7)⊠ Claim(s) <u>3</u>	Claim(s) <u>3</u> is/are objected to.							
8) Claim(s) _	are subject to restriction	n and/or electior	requirement.					
Application Papers		·						
9)☐ The specific	cation is objected to by the E	xaminer.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U.	S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
	1. Certified copies of the priority documents have been received.							
	es of the certified copies of t	• •		en received in this Nationa	al Stage			
	application from the International Bureau (PCT Rule 17.2(a)).							
* See the atta	ched detailed Office action fo	or a list of the ce	rtified copies n	ot received.	•			
Attachment(s)	6': 1(BTO 222)		🗀 .					
 Notice of Reference Notice of Draftspers 	es Cited (PTO-892) son's Patent Drawing Review (PTO-	-948)		v Summary (PTO-413) o(s)/Mail Date				
3) Information Disclose Paper No(s)/Mail Da	ure Statement(s) (PTO-1449 or PTC	O/SB/08)		f Informal Patent Application (P	TO-152)			

Art Unit: 1755

Claim Objections

1. Claim 3 is objected to because of the following informalities: Claim 3 depends upon to claims. Reciting claim 1 is redundant because claim 2 includes the limitations of claim 1. Rewriting the claim deleting claim 1 will overcome this objection.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 8 and 9 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cutler et al (6,770,392).

Cutler et al teach a sintered composite including $Ce_{1-x-x}Ln_xLn_xO_{2-\zeta}$ where Ln is selected from Sm, Gd and x is .05-.25, see column 5, lines 25-35. Also see examples

Application/Control Number: 10/507,032 Page 3

Art Unit: 1755

1, 3-5 which have greater than 99% density. The sintering temperature is between 1400-1600°C. The instant claims are not considered to exclude the titanium component in view of the comprising terminology.

In product-by-process claims, "once a product appearing to be substantially identical is found and a 35 U.S.C. 102/103 rejection [is] made, the burden shifts to the applicant to show an unobvious difference." MPEP 2113. This rejection under 35 U.S.C. 102/103 is proper because the "patentability of a product does not depend on its method of production." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

5. Claims 8 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japanese document 11-273451, translation included.

The Japanese document teaches including CeO_2 and one of Sm_2O_3 and Gd_2O_3 , see Table on page 6 and page 7 of the translation. Examples 1, and comparison 2,5 fall within the instant claims.

In product-by-process claims, "once a product appearing to be substantially identical is found and a 35 U.S.C. 102/103 rejection [is] made, the burden shifts to the applicant to show an unobvious difference." MPEP 2113. This rejection under 35 U.S.C. 102/103 is proper because the "patentability of a product does not depend on its method of production." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

- 6. Claims 1-7 are allowed.
- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kleinlogel et al (6,709,628) is cited as prior art of interest however the taught grain size is limited to .5 microns. Takamura et al (2005/0142053; Taniguchi (6,528,195) and Mori (5,665,482) fail to teach the claimed density and grain size. The prior art of record fails to teach or fairly suggest the claims acicular particle,

Art Unit: 1755

secondary particles made therefrom and method of manufacture. Overs; Rahaman et al; Van Herle et al and Inaba et al are cited as representing the general state of the art.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl E. Group whose telephone number is 571-272-1368. The examiner can normally be reached on M-F (6:30-4:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Primary Examiner
Art Unit 1755

Keg 1-30-06